

**Illinois Commerce Commission Report to the General Assembly:
Experimental Programs Initiated by Electric Utilities Under Section 16-106
of the Electric Service Customer Choice and Rate Relief Law of 1997
During 2000**

The Illinois Commerce Commission

October 2001

Executive Summary

The Illinois Commerce Commission (“Commission”) hereby submits its third annual Report to the General Assembly regarding the experimental programs implemented by electric utilities pursuant to Section 16-106 of the Electric Service Customer Choice and Rate Relief Law of 1997, 220 ILCS 5/16-106 (“Customer Choice Law”). The Report is submitted in response to the directive in Section 16-106 that the Commission “review and report annually the progress, participation and effects of such experiments to the General Assembly.”

During 2000, a total of eleven programs were operated by electric utilities pursuant to Section 16-106. AmerenCIPS and Illinois Power each administered one of the programs, AmerenUE administered two, and seven programs were administered by ComEd. Summary information about these programs is provided below in Table 1.

The Commission has concluded the following about the programs implemented under Section 16-106 during 1997-2000:

- Utilities have operated two types of experimental programs. First, electric utilities have offered programs to specific, narrowly defined customer groups. ComEd is currently operating three of these programs, each of which was available to groups comprised of hundreds of members. However, each of these programs will terminate by the end of 2001.

AmerenUE is currently operating a program of this type, which is available to low-income customers in the Metro East area. This program is currently scheduled to terminate in 2001.

The second type of experimental program implemented by electric utilities concerns measures to address reliability issues. The Ameren companies (AmerenCIPS and AmerenUE), ComEd and Illinois Power have operated several programs of this nature. ComEd’s current programs include a program that induce customers to curtail their usage during periods of heavy demand and a program that rewards customers who can relieve strain on ComEd’s transmission and distribution system through self-generation. ComEd also has a program that compensates customers who suffer service interruptions of specified duration and frequency.

- ComEd’s expenditures on its Section 16-106 programs during 2000, including payments to customers in the form of discounted rates and other participation inducements, were approximately \$28.9 million. ComEd has expended approximately \$120.4 million during 1997-2000 on its Section 16-106 programs.
- AmerenUE’s two-year experimental program is known as the “Pay As You Go Program.” This program is designed to assist low-income customers in achieving a balance between their energy usage and the funds available to pay for that usage. The budget for the “Pay As You Go Program” is about \$250,000.
- There should be no direct impact of the experimental programs on the rates of customers not participating in the programs because the Commission is required to

exclude the costs and revenues associated with Section 16-106 programs when setting electric rates.

- The Commission believes that the value of the information obtained from some of the programs obtained is lower than the costs associated with those programs.
- Customers in retail businesses who do not obtain the discounts associated with some of the experimental programs could face a slight competitive disadvantage relative to the customers who receive the discounts; this advantage will persist until December 31, 2006, the date at which utilities may cease the imposition of transition charges upon customers who choose alternative suppliers.
- The companies that have implemented Section 16-106 programs could have filed most of these programs with the Commission in the traditional manner, which would have permitted the Commission to review and comment on the programs prior to their implementation.

Section 16-106 states that the Commission may offer recommendations for changes to the experimental programs. The Commission offers the following recommendation:

The General Assembly should consider requiring utilities that offer Section 16-106 programs to customers or customer classes eligible for “delivery services,” to provide the transmission and distribution portion of such programs under the same terms, conditions and rates as the applicable delivery services tariff.

The Commission believes that the pricing flexibility offered by Section 16-106 may provide incumbent utilities the opportunity to discriminate in the provision of regulated monopoly services, such as transmission and distribution services, by discounting prices or providing those services under terms and conditions that unduly discriminate against alternative suppliers and their customers taking delivery services.

The Commission specifically notes that this recommendation applies solely to programs under Section 16-106 as currently understood by the Commission and must not be interpreted to reflect any determination by the Commission about its authority to require a utility to provide bundled energy services to its own customers using the applicable delivery services tariffs.

Table 1 provides general information about the eight Section 16-106 programs that electric utilities operated during 2000:

Table 1: 2000 Experimental Programs Implemented Under Section 16-106 of the Public Utilities Act¹

Name of	Electric Utility	Eligible Customers	Participation Levels And Program Results
----------------	-------------------------	---------------------------	---

¹ The Ameren companies’ and Illinois Power Company’s load curtailment programs, which were not used during 2000, are not described in this table.

Program

Pay As You Go Billing Program	AmerenUE	Low-income customers in the East St. Louis Metro area	100 LIHEAP customers selected for program
Affinity Group Billing Experiment	ComEd	Illinois Retail Merchants Association members	763 customers with a total of 2,497 premises during 2000
Consolidated Billing Experiment	ComEd	Retail businesses and schools	210 multi-site retail trade establishments and 226 school district sites
Dispatchable Back-Up Generation and Distribution Reliability Pricing Experiment	ComEd	Customers served by designated distribution feeders who could install generating equipment	Three customers participated. ComEd deferred \$1.8 million in transmission and distribution work for one year.
Load Curtailment Pricing Experiment for Electric Service - Revised	ComEd	Customers who could commit to curtail load when requested. Program also available to RESs	3,055 customers committed to curtail 559.1 MW. No general curtailments were called.
	ComEd	Customers whose electric service was interrupted for periods of specified duration.	Reliability and Restoration Pricing Experiment
Student Power 2000 Pricing Experiment	ComEd	Public and private grade K-12 schools in ComEd service area	Payments to 14,081 customers as a result of service interruptions.
Wind and Photovoltaic Generation Pricing Experiment	ComEd	ComEd retail customers who own and operate small (up to 40 kW) wind or photovoltaic generators	727 grade K-12 schools participated during 2000.
Seven residential customers and one commercial customer participated in the program during 2000.			Seven residential customers and one commercial customer participated in the program during 2000.

Table of Contents

Executive Summary ii

Table of Contents v

Tables vii

I.Introduction 1

II. Section 16-106 of the Public Utilities Act 3

III.Section 16-106 Programs Offered by ComEd During 2000 4

- A.Consolidated Billing Experiment 4
 - 1.*Program Summary* 4
 - 2.*Program Progress, Participation and Effects* 5
- B.Affinity Group Billing Experiment 8
 - 1.*Program Summary* 8
 - 2.*Program Progress, Participation and Effects* 9
- C.Student Power 2000 Pricing Experiment 10
 - 1.*Program Summary* 10
 - 2.*Program Progress, Participation and Effects* 11
- D.Load Curtailment Pricing Experiment for Electric Service - Revised 12
 - 1.*Program Summary* 12
 - a) Energy Based Option 13
 - b)Capacity Based Option 14
 - c)RES Capacity Based Option 14
 - d)Red-Orange-Yellow ('ROY') Feeder Curtailment Addendum 14
 - 2.*Program Participation, Progress and Effects* 14
- E.Wind and Photovoltaic Generation Pricing Experiment 15
 - 1.*Program Summary* 15
 - 2.*Program Participation, Progress and Effects* 17
- F.Dispatchable Back-up Generation and Reliability Pricing Experiment 18
 - 1.*Program Summary* 18
 - 2.*Program Participation, Progress and Effects* 19
- G.Reliability and Restoration Pricing Experiment 20
 - 1.*Program Summary* 20
 - 2.*Program Participation, Progress and Effects* 21

IV.Section 16-106 Programs Operated by AmerenUE During 2000 22

- 1.*Program Summary* 22

2.*Program Participation, Progress and Effects* 23

V.Section 16-106 Programs Initiated by Illinois Power Company During 2000 24

1.*Program Summary* 24

2.*Program Participation, Progress and Effects* 25

VI.Conclusion 25

A.Effect on the Electric Rates of Non-participants 26

B. ..Costs and Benefits of the Experimental Programs 26

1.*ComEd's Programs Related to Reliability* 26

2.*The Affinity Group Billing, Consolidated Billing, and Student Power 2000 Pricing Experiments* 27

a) The Affinity Group Billing Experiment 27

b) The Consolidated Billing Experiment 27

c) Student Power 2000 Pricing Experiment 27

C.Are the Section 16-106 Programs "Experiments?" 27

1.*Programs Related to Reliability* 27

2.*The Consolidated Billing, Affinity Group Billing and Student Power 2000 Pricing Experiments* 28

3.*AmerenUE's Pay As You Go Program* 28

D.Effects on Competition 28

1.*The Programs Related to Reliability* 29

2.*The Affinity Group Billing and Consolidated Billing Experiments* 29

3.*Student Power 2000 Pricing Experiments* 30

E.....Recommendations for Ongoing Section 16-106 programs 30

Appendix 32

Tables

I. Introduction

The “Electric Service Customer Choice and Rate Relief Law of 1997” (“Customer Choice Law”), enacted into law on December 17, 1997, made a number of significant changes to the Public Utilities Act (“Act”). Among the changes is new Section 16-106, which permits electric utilities to offer experimental programs at their discretion to a selected group of customers. According to Section 16-106, the programs offered under this section of the Act may include experiments for the “provision or billing of services on a consolidated or aggregated basis, as well as other experimental programs.”

Section 16-106 requires the Commission to report annually to the General Assembly describing the Commission’s evaluation of the “progress, participation and effects” of these programs. This is the Commission’s third report to the General Assembly concerning Section 16-106 programs. The Commission’s initial report was submitted to the General Assembly in January 1999, and its second report was submitted in June 2000.

To date, four electric utilities, AmerenCIPS, AmerenUE, ComEd, and Illinois Power Company, have undertaken experimental programs filed with the Commission pursuant to Section 16-106. AmerenCIPS has operated one program, AmerenUE and Illinois Power have operated three programs, and ComEd has operated a total of ten programs through 2000. ComEd and Illinois Power initiated new programs during 2000. Only the programs that were in effect during 2000 are described in this report.

Of the seven ComEd programs that were in operation during 2000, three of the programs were initiated by ComEd during 1997-98. ComEd initiated a new program in 1999 that was continued, with some modification, into 2000. ComEd also initiated three other new programs during 2000.

ComEd describes two of the seven programs that were in effect during 2000 as billing programs. These programs (the “Consolidated Billing Experiment” and the “Affinity Group Experiment”) were initiated soon after the Customer Choice Law became effective. The billing programs have the general purpose of assisting ComEd and certain customer groups in making a smooth transition to competitive electric markets.

With the exception of the “Student Power 2000 Power Pricing Experiment,” which is intended to inform schoolchildren about the energy choices they will make as adults, each of ComEd’s pricing programs concerns, in one way or another, the reliability of its electric service. The “Dispatchable Back-Up Generation and Distribution Reliability Pricing Experiment” is designed to encourage customers served by high-stressed distribution feeders

to install generating capacity to relieve the load on the feeders. Customers participating in “The Load Curtailment Pricing Experiment for Electric Service - Revised” were offered payments in exchange for agreeing to curtail their electric load upon ComEd’s request. This program was a continuation of similar load curtailment programs operated by ComEd prior to 2000. Under the “Reliability and Restoration Pricing Experiment,” ComEd compensated customers whose service had been interrupted at least three times for four hours during a 60-day period or for a single eight-hour period, and who otherwise met the program’s requirements that are discussed below. Finally, ComEd offered the “Wind and Photovoltaic Generation Pricing Experiment,” which encouraged customers to operate wind and photovoltaic generating equipment.

During 1997-2000, customers have realized approximately \$113.5 million in savings from to their participation in ComEd’s programs.

The pricing programs initiated by the Ameren companies in 1999, and by Illinois Power in 2000, are conceptually similar to the load curtailment programs implemented by ComEd. Additionally, AmerenUE is operating a second program, the “Pay As You Go Program,” which is designed to evaluate low-income customers’ response to an innovative bill payment arrangement option.

As required by Section 16-106, Ameren, ComEd and Illinois Power filed notices with the Commission containing statements describing each of the programs. The notices generally included the following information: effective program dates; program availability; general program purpose and objectives; and, participation incentives (e.g., rate discounts), if any. The letters sent to the Commission accompanying each notice generally reflected the Companies’ interpretation of Section 16-106 that an experimental program becomes effective upon the filing of the notice.

The balance of this Report describes in more detail the ten programs filed under Section 16-106 that were in effect during 2000. As required by Section 16-106, the Report also describes the Commission’s assessment of the “progress, participation and effects” of each of the programs. After each program description, a table is presented showing summary information about the program. In the Conclusion of the Report, the Commission offers general comments about issues related to Section 16-106 experimental programs.

The authority provided electric utilities to offer certain types of experimental programs is stated in Section 16-106 as follows:

Sec. 16-106. Billing experiments. During the mandatory transition period,² an electric utility may **at its discretion** conduct one or more experiments.... (Emphasis supplied)

Section 16-106 states that electric utilities may choose which customers are eligible for billing experiments (and, of course, which are not eligible), and that the Commission should allow the experiments to proceed:³

The offering of such a program by an electric utility to retail customers participating in the program, and the participation by those customers in the program, shall not create any right in any other retail customer or group of customers to participate in the same or a similar program. The Commission shall allow such experiments to go into effect upon the filing by the electric utility of a statement describing the program...

Section 16-106 makes clear, however, that the Commission retains its authority to approve experimental programs submitted to the Commission for approval under Sections of the Act other than Section 16-106:⁴

Nothing contained in this Section shall be deemed to prohibit the electric utility from offering, or the Commission from approving, experimental rates, tariffs and services in addition to those allowed under this Section.

It thus appears that one effect of Section 16-106 is to provide electric utilities that desire to implement experimental programs with a choice. Utilities may either (1) submit the program to the Commission for approval in the traditional manner; or, (2) implement a qualifying program as a billing experiment pursuant to Section 16-106.

Section 16-106 lists the types of billing experiments that may be offered by electric utilities. The experiments may include those

...for the provision or billing of services on a consolidated or aggregated basis, for the provision of real-time pricing, or other billing or pricing experiments, and may include experimental programs offered to groups of retail customers possessing common attributes as defined by the electric utility, such as the members of an organization that was established to serve a well-defined industry group, companies having multiple sites, or closely-located or affiliated

²Section 16-102 states that the “mandatory transition period” will end on January 1, 2005.

³ The Commission has not undertaken any formal investigation to determine whether any of the experimental programs is consistent with Section 16-106.

⁴ No experimental programs have been brought by electric utilities to the Commission for approval since the enactment of the Customer Choice Law.

buildings, provided that such groups exist for a purpose other than obtaining energy services and have been in existence for at least 10 years.

The Commission must inform the General Assembly about the experiments filed under Section 16-106:

The Commission shall review and report annually the progress, participation and effects of such experiments to the General Assembly. Based upon its review, recommendations for modification of such experiments may be made by the Commission to the Illinois General Assembly.

This Section of the Report provides information about the seven ComEd experimental programs that were in effect during 2000.

On December 30, 1997, shortly after the Customer Choice Law became effective, ComEd submitted a notice to the Commission describing the Company's implementation of the Consolidated Billing Experiment. The Consolidated Billing Experiment is effectively a continuation, under Section 16-106, of a Commission-approved program implemented by ComEd in 1996 called Rider CB that was terminated upon the inception of the Consolidated Billing Experiment. The customers who were taking service under Rider CB transferred to service under the Consolidated Billing Experiment.

ComEd stated in its 1997 filed statement that the program is designed to assist ComEd in developing systems and technologies that will allow for measuring and billing aggregated loads. An additional purpose is to gain experience with Automatic Meter Reading ("AMR") technologies. According to the filing, ComEd believes that these technologies would benefit customers in three ways: First, by facilitating the distribution of power and energy sold to customers by alternative suppliers; second, by allowing ComEd to "treat a customer with many geographically dispersed locations as a single customer"; and, finally, through the ancillary benefit of encouraging improved energy management by participating customers. ComEd anticipated that, through the design of the rates for service, customers would reduce their electric bills by decreasing their demand on ComEd's system during peak demand periods.

As noted above, the experimental program was offered to the same customers who were eligible for Rider CB. Customers eligible for the Consolidated Billing Experiment were two customer subclasses within the commercial customer class. Specifically, eligible customers included businesses in retail trade that had at least five premises and a demand of at least 25 kilowatts ("kW"), with a total demand of 10 megawatts ("MW") to be served under the program. School districts with at least three premises that had at least 25 kW of demand with a total demand of at least 3 MW that would be served under the program were also eligible. Participation in the experiment was voluntary.

ComEd anticipated that participating customers would save about 5% on their electric costs. Originally, a customer's bill was based on two demand charges. One of the demand charges

was based on the number of kilowatts supplied at each of the customer's premises at the time of the highest coincident demand at all of the customer's premises. The other demand charge was based on the maximum demand at each of the customer's premises.

On December 30, 1999, ComEd revised its Consolidated Billing Experiment by filing a statement with the Commission describing the revisions to the program. In the filing, ComEd noted that many customers participating in the original experiment had used the knowledge gained from aggregating their load under the experiment to shop for and purchase energy as a group. ComEd also stated that it anticipated that, by the end of the first quarter of 2000, most customers participating in the experiment would have switched to delivery services. Therefore, ComEd decided to close the experiment to new customers and to terminate the experiment for existing participants as of June 30, 2001.

In the filing, ComEd also revised the method for calculating the demand charges. With the few remaining participants, the cost to provide coincident demand billing in the manner set out in the original experiment could no longer be justified. Therefore, the company decided to use a Coincident Demand Charge based upon each participant's billing history. The second demand charge, the Maximum Demand Charge, was calculated as set out in the original experiment.

The results of this program indicate that the program was well received by both groups of eligible customers. Retail trade establishments had a higher participation rate than the school districts.

In its "Report to the Commission" filed August 3, 1999, ComEd stated that the primary reason that motivated customers to participate in the program was to save money on their electric bills. A secondary reason was for the convenience of receiving a single bill that consolidates the bills for each of the customers' individual premises.

ComEd also stated that few participating customers have attempted to reduce their coincident demands, which could have generated additional customer savings. This finding indicated that many customers do not make the effort required by consolidated billing programs to realize the maximum achievable savings on their electric bills when given an opportunity to do so.

The majority of the problems encountered and costs incurred by participating customers were associated with the installation and servicing of telephones needed for the AMR meters used in the program. ComEd stated that labor and material costs for the installation of landline telephones ranged from \$150 to \$400 per meter, although customers were permitted to use cellular telephones. Customers that used a landline-based telephone were also subject to charges assessed by the local telephone company of about \$15 per month per landline installation. Additionally, customers were required to rent an AMR meter, at cost of \$20.05 or \$39.05, depending on whether the customer has a landline-based or cellular-based telephone installation.

In its assessment of the program, ComEd stated that, while participation was high, and customers were saving about 5% to 7.5% on their electric bills, it found that some customers

have had “difficulties” with the experiment, particularly with the installation and cost of the landline telephones that are used with the AMR equipment. For its part, ComEd stated that it gained expertise with the integration of metering, communications, and billing technologies used in the experiment. ComEd also obtained hourly load data from premises of varying sizes that it might not have otherwise collected. ComEd also stated that its experience with the Consolidated Billing Experiment has assisted in the implementation of open access in Illinois.

In its August 1999 filing, ComEd reported that it encountered problems related to meter installation and meter reading, as well as data transfer and processing problems in the billing systems used in the experiment. This resulted in some participants experiencing delays in receiving their electric bills. The implementation of ComEd’s new billing system has also resulted in new billing problems. However, ComEd believes that these problems were eliminated with the December 30, 1999 filing.

ComEd’s December 1999 filing also provided additional information about the progress of the program. In its filing, ComEd stated that the experimental program was largely successful in meeting its objectives of obtaining information about the systems and technologies used in aggregating (for billing purposes) the demand and energy usage of geographically dispersed customers. ComEd’s filing also stated that it anticipated that participating customers would become more knowledgeable about purchasing energy as a group. ComEd believes that that objective was also met.

ComEd provided information to the Commission indicating that it believes that participating customers have benefited from the program by saving money on electric costs and also by receiving a single bill for multiple premises.

ComEd stated that there have been no adverse effects on reliability due to the program.

ComEd reported to the Commission that most of the Consolidated Billing program customers have chosen to terminate their participation in the program to purchase electricity to become delivery services customers.

In the three years of the Consolidated Billing Experiment, customers have received discounts on their electric bills of approximately \$35.0 million. ComEd has also incurred additional administrative and metering costs of approximately \$3.1 million.

In 1996, the Commission undertook an investigation of the Rider CB program after it had been in effect for a few months. In the course of its investigation, the Commission posed several questions to ComEd, among which were questions relating to whether Rider CB is an “experiment” and whether Rider CB would elicit information of value to ComEd and to future open access customers. After hearing evidence from several parties about these questions, the Commission found that ComEd’s responses to the questions were satisfactory. In particular, the Commission found that “Rider CB is a lawful experimental billing program.”⁵

As a result of the discounts provided to participating customers, the transition charges that

⁵ Commission Order, Docket 96-0485, p. 34.

participating customers who become delivery services customers are paying are lower than the transition charges that non-participating customers who have switched suppliers are paying. The difference in transition charge payments paid by participating customers and non-participating customers is equal to the amount of the discount program customers have obtained through their participation in the experimental program. Even though the program ended on June 30, 2001, program participants will still receive a discount on their electric bills for several years that probably will not be obtained by non-participants.

Table 2: Consolidated Billing Experiment

Program Type / Effective Dates	CONSOLIDATED BILLING EXPERIMENT (COMED)		
	Program Objectives	Eligible Customers / Participation Incentives	Program Results / Expenditures
The billing experiment began 12/30/97 and terminated on 6/30/01. The experiment was formerly known as Rider CB.	Experiment with the billing and metering systems for customers under common ownership.	Businesses in retail trade with at least five premises and 25 kW demand, with a total demand of 10 MW and school districts with at least three premises and 25 kW of demand, with a total demand of at least 3 MW.	Participation during 2000 from 210 multi-site retail trade establishments and 226 school district sites.
		Participants were expected to save about 5% on electric bills.	Customer bill savings average about 5% to 7.5%. Customer savings of \$35.0 million through 2000.

The Affinity Group Billing Experiment, which was available to members of the Illinois Retail Merchants Association (“IRMA”) only, was described in a December 31, 1997 filing with the Commission. ComEd’s notice stated that the program had several objectives: (i) to learn about the potential for aggregating the electric loads of related and unrelated companies; (ii) to gather information that would assist program participants to make informed decisions about the procurement of the participants’ electric supply; to identify energy efficiency measures for program participants; and, (iii) to analyze the value of the energy efficiency measures’ usefulness in helping ComEd reduce customer load during periods of system emergencies. ComEd’s notice also stated that the IRMA membership, which includes both large and small single- and multiple-site companies, is well suited for “exploring these objectives.” Additionally, ComEd anticipated that IRMA members would assist ComEd in understanding the needs of commercial customers in making the transition to competitive electric markets.

The enrollment period for the program ended on March 31, 1998, except for already- enrolled customers who subsequently acquired or built additional facilities. Participating customers were required to agree that they would provide information to ComEd upon request, and to make efforts to curtail load as requested.

As an incentive for participation, customers received a reduction in demand charges, which was expected to result in average annual electric savings of about 15%. ComEd anticipated that it would offer the program for an initial three-year term.

ComEd supplied data to the Commission that indicated that that over half of the eligible customers participated in the program. In a report to the Commission, ComEd stated that the primary reason why customers participated in the program was to reduce electric costs.

The data also indicated that most of the majority of the eligible customers declining to participate were single-site customers. Reasons why some customers did not participate included the closure of many small businesses and the belief held by some customers that

their low level of expenditures on electricity did not justify the level of effort required to save on electricity costs. More recently, the participation rate in the program has dropped significantly as delivery services have become available.

ComEd has also noted that it has gained insight regarding how the electric load of related and unrelated companies can be aggregated for the purpose of procuring electric supply.

ComEd has spent about \$50.8 million through the first three years of the program.

ComEd stated that it believes that the program has made a contribution to reliability. Program participants were asked twice in 1998 and three times during 1999 to reduce their energy usage. Program participants responded by curtailing their electric demand by about a maximum of about 20 MW during the three 1999 curtailments. IRMA has also assisted ComEd in educating its members about how to curtail their energy usage without disrupting the flow of business.

In its various reports to the Commission, ComEd has not indicated that it has fully analyzed the data it has collected concerning changes in participants' consumption patterns, so no conclusions have been drawn with respect to consumption.

The Commission notes that customers receiving rate discounts from participation in Section 16-106 programs typically receive a discounted electric rate. As noted in the previous section, such discounts result in transition charges that are lower for program participants than for non-participants. The difference in transition charges will last until the termination of the period in which customers must pay transition charges, which, for ComEd, is the end of 2006.

It appears that the advantage that participants have gained over non-participants is small, on average. The Commission has noted in prior reports that, according to the Census of Retail Trade,⁶ electricity costs comprise only about 3.2% of operating costs for the average retail trade establishment. This means the advantage IRMA members will have until the end of 2006 over customers who were not eligible for the Affinity program is, on average, only about 0.5% (i.e., $0.032 * 0.15$) of operating costs.

Table 3: Affinity Group Billing Experiment

Program Type / Effective Dates	AFFINITY GROUP BILLING EXPERIMENT (COMED)		
	Program Objectives	Eligible Customers / Participation Incentives	Program Results / Expenditures
Billing program began 12/31/97 and was terminated on 12/31/2000.	To learn about load aggregation potential; To develop educational material and to identify energy efficiency measures.	Retail trade establishments received approximately 15% discount on electric bills	763 customers representing a total of 2,497 premises participated in the program during 2000. Customers received discounts totaling \$50.4 million during the

⁶ Table 8, Census of Retail Trade, Bureau of the Census, U.S. Department of Commerce, 1992.

three-year life of the program.
ComEd had administrative costs of
\$0.4 million.

The Student Power 2000 Pricing Experiment was available to the estimated 4,300 public and private schools in ComEd's services territory that offer courses for grade levels kindergarten through the twelfth grade.

Schools with grade levels kindergarten through the fifth grade conducted annual energy projects with their students. The students at schools with grade levels sixth through twelfth grade performed annual energy audits. With the assistance of teachers, the students at these higher-grade levels developed energy plans to identify energy efficiency measures at their schools.

ComEd established a ten-member Advisory Board that provided ComEd with insight as to how to teach students about energy consumption. The Advisory Board also gave ComEd feedback concerning how schools value and approach energy efficiency measures.

Schools participating in the Student Power 2000 Pricing Experiment received a discount of 10% on their electric bills.

The Student Power 2000 Pricing Experiment was offered by ComEd for an initial three-year term. The program terminated was implemented on January 30, 1998, and, pursuant to its terms, terminated in 2001.

Implementation of the program began with the commencement of the 1998-99 school year. A total of 1,531 schools have participated in the program; 727 schools participated during 2000. The drop in participation was mainly due to availability of delivery services, although some school districts lost their eligibility for the program by not complying with reporting requirements.

ComEd initially encountered difficulty in "identifying, contacting, and developing relationships with eligible customers and participants" due to the large number of school districts and individual schools that are participating in the program. However, over the life of the program, ComEd developed a participant database that enabled ComEd to record and maintain participant data.

ComEd apparently has not made a measurement with respect to charges to the schools' usage as are a result of their participation in the program. ComEd believes, however, that some schools have adopted energy efficiency measures as a result of the audits that students conducted as part of the program.

ComEd believes that the schools found the programs to be worthwhile for reasons other than the cost savings that schools obtained for the participation in the program. ComEd reported that approximately 90,000 students have participated in the Experiment at approximately 1,500 schools, and thereby gained an appreciation as to how energy can be used efficiently.

Teachers used lesson plans that ComEd developed that teach students about energy use.

There are limited potential competitive effects of this program. Obviously, grade schools do not compete against each other, as other commercial customers do. However, the schools participating in the program have become eligible to purchase electricity from new suppliers. Through this program, ComEd will obtain information that will be useful to ComEd if it wishes to compete with other suppliers to sell electricity to the school districts.

Table 4: Student Power 2000 Pricing Experiment

STUDENT POWER 2000 PRICING EXPERIMENT (COMED)			
Program Type / Effective Dates	Program Objectives	Eligible Customers / Participation Incentives	Program Results / Expenditures
Pricing program began 1/30/98, and had a three-year duration.	To learn about students' ability to learn about energy efficiency and to develop practical energy plans for their schools.	School districts are eligible. Participants are expected to save about 10% on their electric bills.	727 schools participated during 2000. Customers received discounts totaling \$14.3 million since inception of the program. ComEd had additional costs of about \$0.4 million during the life of the program.

On December 21, 1999, ComEd filed a statement with the Commission describing its plans to offer a successor to its load curtailment programs that were in operation during prior years. ComEd filed a statement on April 20, 2000, that described the revisions to the program. The "Revised Program" ended on December 31, 2000.

ComEd's statements indicated that the experimental program was intended to operate within the context of electric restructuring (markets opened to all non-residential electric customers in January 2001). The statements also indicated that the purpose of the program was to test the willingness of ComEd's power and energy customers to provide curtailment in exchange for market-based compensation.

ComEd described the program as an effort to determine whether customers could voluntarily provide "curtailment in sufficient quantity and duration to aid in system operations," including relieving constraints in the operation of its transmission and distribution systems. Additionally, ComEd noted that it might call curtailments to obtain "more economic system operation." ComEd's statement noted that the program has the potential to reduce peak generation, which could reduce emissions of carbon dioxide and nitrous oxide.

The Load Curtailment Pricing Experiment for Electric Service - Revised was available to non-residential customers only. The program includes provisions for customers receiving bundled service from ComEd as well as for customers taking delivery services.⁷

⁷ Delivery services customers are those customers who have switched to a "Retail Electric Supplier" ("RES"), or are taking service under the Section 16-110 Power Purchase Option ("PPO").

Customers had two primary options, the “Energy Based Option” and the “Capacity Based Option” to choose from if they wished to participate in the program. Both bundled customers and delivery services customers served by interval recording meters were eligible to participate in the Energy Based Option portion of the program. Only delivery services customers were eligible for the Capacity Based Option part of the program.

The program also included provisions that were intended to encourage RESs “to work with their own energy customers to obtain mutually beneficial curtailment.” This part of the program was called the “RES Capacity Based Option.” Each portion of the Load Curtailment Pricing Experiment for Electric Service - Revised is described in more detail below.

On April 20, 2000, ComEd filed a statement with the Commission amending the program. This program revision incorporated the “Red-Orange-Yellow (‘ROY’) Feeder Curtailment Addendum.”

As an early part of the implementation stage of its program, ComEd devoted considerable efforts to explain the program to its customers. ComEd developed promotional material that was distributed to customers, and visited customer facilities to analyze customer curtailment options. ComEd also developed procedures to notify customers of curtailment requests in a timely manner. Curtailment requests were sent by fax, with subsequent follow-up by ComEd account managers.

ComEd’s statement noted that it retained the right to determine the number of customers eligible to participate in the program.

This option was available to both bundled customers and delivery services customers. Additionally, customers eligible for this curtailment option had to be able to provide a minimum curtailment level of the greater of at least 5% of their 1998 peak demand or 10 kW.

June to September 2000 was identified as the period during which curtailments might be called. Customers were subject to curtailment up to 15 times per curtailment season. The duration of each request was scheduled to be between two and seven hours, up to a maximum of 75 hours per year. ComEd’s statement indicated that it would provide no less than a one-hour notice prior to any curtailment event.

Participating customers received a minimum of \$1.00 per kWh reduced during curtailment periods, provided that the curtailment amount achieved was no less than 5% of the customer’s peak demand, or 10 kW, whichever is greater. ComEd noted that it would use its discretion to determine whether payments in excess of the minimum would be offered. No penalties were to be assessed for a customer’s failure to respond to a curtailment request. ComEd’s statement noted that customers with demand in excess of 3,000 kW might be entitled to individual load reduction agreements that specify load reduction payments that are greater than the payments applicable to smaller-use customers.

The amount of each customer’s load curtailment response would be calculated by comparing a customer’s typical daily use absent the curtailment with the customer’s actual usage.

Payments for curtailments were due to be credited to customers by December 31, 2000.

Only delivery services customers were eligible for the Capacity Based Option. To be eligible, Capacity Based Option customers had to be in a position to provide a minimum of 5% of the participant's maximum peak load, or 100 kW, whichever was greater.

Customers were paid at a rate of \$35 per kW per season for the average number of kW reduced during curtailment periods. Customers providing "extended curtailments" exceeding seven hours duration were paid at the rate specified in the Energy Based Option program. No penalties were assessed for a failure to comply with ComEd's requests to curtail load.

Under this program, customers of Retail Electric Suppliers ("RESs") became eligible to participate in load curtailment programs. RESs were required to identify customer sites and accounts that were to participate in the program. RESs were offered payments of amount of \$20,000 per megawatt per season

(i.e., \$20 per kW per season) for each megawatt that their customers curtailed. ComEd's statement noted that ComEd might offer "customer notification and administrative services" to RESs in connection with the program. The statement also noted that a RES's participation in the program would not change any wholesale agreements in effect between ComEd and the RES.

In this part of the 2000 Load Curtailment Experiment - Revised, ComEd offered curtailment payments to customers served by highly loaded distribution feeders or "ROY feeders." ComEd's statement noted that ROY feeders constitute approximately 350 out of 4,600 feeders in the ComEd system, serving about 25,000 commercial and industrial customers. All customers served by ROY feeders were eligible for the program.

Participating customers were awarded a "Signing Bonus," which ranged from \$50 to \$500, depending on the participating customer's curtailment ability. In addition, customers who could curtail more than 10% of their predicted energy usage were eligible for a bonus termed the "Performance Adder," which ranged in amounts from \$50 to \$1,500.

ComEd received total customer curtailment commitments of an estimated 553 megawatts for customers eligible for the three programs. However, with one exception, which involved customers served by a single substation, ComEd did not request curtailments during 2000.

ComEd had a program in effect during 1999 that was similar to the Energy Based Option, so a comparison can be made with respect to the level of participation in this aspect of the program. Approximately 1,100 more customers participated in the 2000 version of the load curtailment program than participated in the program during 1999. ComEd attributes the increase in participation to ComEd's efforts to inform customers about the program, in addition to the market-based compensation on which incentives payments were based.

Approximately 850 customers participated in the Capacity Based Option, which was not available during 1999. No RESs participated in the RES Capacity Based Option portion of the program.

Table 5: Load Curtailment Pricing Experiment for Electric Service - Revised

LOAD CURTAILMENT PRICING EXPERIMENT FOR ELECTRIC SERVICE - REVISED (COMED)

Program Type / Effective Dates	Program Objectives	Eligible Customers / Participation Incentives	Program Results / Expenditures
	To deter mine whet her volun tary curtai lment appro ach	Bundled service and delivery services customers who committed to curtail load when requested. Program also available to Retail Electric Suppliers. Customers and RESs receive payment for each kWh and/or kW reduced.	Pricing program in operation during Summer 2000.

can
aid in
system
operations

A total of 3,055 customers committed to curtail 559.1 MW. No general curtailments were called.

ComEd paid \$5.4 million in incentive payments to program participants.

8

ComEd filed this experimental program on February 7, 2000. The purpose of the “Wind and Photovoltaic Generation Pricing Experiment” was to provide an incentive to retail customers to consider the use of wind and photovoltaic generation sources.

ComEd’s filing stated that several of its experimental programs are designed to enhance system reliability. Unlike its previous programs, which focused on the use of demand-side resources to enhance reliability, the Wind and Photovoltaic Generation Pricing Experiment program used supply-side measures to advance the same goal.

Wind and photovoltaic power systems are examples of “distributed resources,” a term that includes, among other things, customer self-generation at the distribution level. ComEd stated that distributed resources could enhance reliability by freeing transmission line capacity and distribution line capacity to serve reliability purposes. According to ComEd, distributed resources may also have other benefits. For example, distributed resources could benefit a utility’s system to the extent the resources are able to provide a substitute for investment in a utility’s transmission and distribution system. Distributed resources could also benefit customers individually if the resources are located on a customer’s site. With this experiment, ComEd intended to determine whether small wind and photovoltaic power systems are capable of enhancing system reliability.

In addition to benefits related to system reliability, ComEd stated that the program could benefit customers and vendors by providing experience with ComEd’s “Interconnection Guidelines for Photovoltaic Systems.” Additionally, the program would permit ComEd to gain experience with the metering and billing systems that are needed to support expansion of the wind distributed generation market. As an additional benefit, the program could encourage private investment in wind and photovoltaic energy sources. According to ComEd, such investment would stimulate economic growth, diversify Illinois energy resources’ mix and also protect the environment.

The program was available to retail customers who own and operate wind and photovoltaic

⁸See text for a description of the payments.

generators located on the customer's premises, provided that the generators are less than 40 kW in size. Total participation in the program was limited to 0.1% of the total load supplied by ComEd during the previous year. Thus, total participation was limited to approximately 200 MW. The participants were selected by ComEd to ensure the safety and reliable operation of the Company's distribution system. Each generator had to be capable of being classified as a "Qualifying Facility," as that term is defined in 83 Illinois Administrative Code Part 430.

A single meter with dual channels was used to measure the amount of power generated by the customer and supplied to ComEd and the amount of power delivered by ComEd to the customer. Participants were not be obligated to pay for this meter.

The rate that customers paid for the electricity supplied by ComEd was based on the same rates applicable to customers of similar end-use characteristics. The rate ComEd paid for the power generated by the customers were the rates specified in ComEd's Rider 4 (approximately one to two cents per kWh). ComEd also offered an "annual participation incentive" to customers as an inducement to participate in the program. This payment was equal to the difference between the customer's average retail rate (exclusive of the customer's monthly customer charge and certain taxes and other fees). Effectively, then, participating customers received credit for the power they generated and sold to ComEd in the amount equal to the customer's retail rate, rather than the much lower rate specified in Rider 4.

ComEd's statement noted that customers could apply to the Department of Commerce and Community Affairs for a grant or rebate under the "Renewable Energy Resources Program" to help pay for the wind or photovoltaic generator.

ComEd stated that it would obtain data for a period of five years to determine the effectiveness of the program. At the end of this period, ComEd may decide to terminate, modify, or extend the program in its present form. Program participants may remain in the program for five years and may terminate their participation in the program upon thirty days written notice.

ComEd noted that it expended significant amount of effort to make information about the program available to potential customers. ComEd included bill inserts in customer bills describing the program, issued press releases and established a hotline that customers could call to obtain information about the experiment. ComEd also enlisted the aid of organizations such as the Environmental Law and Policy Center to promote the experiment.

ComEd installed automatic meter reading equipment at customer locations capable of recording the amount of electricity customers were supplying to ComEd from their generators. The meters were also capable of recording the time at which electricity is supplied to ComEd. These meters communicated with ComEd electronically.

ComEd stated that its technical and billing and credit personnel addressed issues relating to the experiment.

Seven residential customers and one commercial customer participated in the program during 2000. Each customer operated photovoltaic generating equipment, and one customer also operated wind-powered equipment. No customer used wind-powered generating equipment alone. Based on information from the Department of Commerce and Community Affairs, ComEd believes that about 35 to 40 are eligible for this program.

The eight participating customers sold ComEd 4,280 kWh and received payments from ComEd totaling \$49.09. By the end of the year, 25.55 kW were enrolled in the program. Of this total, 10 kW was attributable to wind-powered generation.

Costs incurred by ComEd in administering the program include the costs to promote the program (which ComEd notes are part of ComEd's expenditures relating to the promotion of renewable energy), administrative costs, and costs that were incurred in connection with the installation of the automatic meter reading equipment. As noted above, ComEd provided the meters used in the program.

In its preliminary assessment of the program, ComEd noted that the program's currently small size does not make it possible to determine whether these resources could have a significant impact on reliability. ComEd also noted, however, that despite the program's small size, ComEd has gained experience with the metering and billing systems that support the distributed resources market. With respect to the program's participation rate, ComEd stated that it observed that some customers who operate wind-powered and photovoltaic equipment did not have excess energy to supply to ComEd, and therefore did not participate in the program. Other customers operated generating equipment with capacities greater than 40 kW. These customers were therefore ineligible for the program.

Table 6: Wind and Photovoltaic Generation Pricing Experiment

WIND AND PHOTOVOLTAIC GENERATION PRICING EXPERIMENT (COMED)			
Program Type / Effective Dates	Program Objectives	Eligible Customers / Participation Incentives	Program Results / Expenditures
Pricing program was filed 2/7/2000. Program has initial five-year term.	To determine whether small wind and photovoltaic power systems can provide reliability-enhancing measures.	ComEd retail customers who own and operate small (up to 40 kW) wind or photovoltaic generators located on the customer's premises.	Seven residential customers and one commercial customer participated in the program during 2000. Customers sold 4,280 kWh to ComEd and received \$49.09 as payment.

On March 10, 2000, ComEd filed a statement with the Commission describing its intention to implement the "Dispatchable Back-up Generation and Reliability Pricing Experiment," a program that was designed to use customer-owned generation to reduce the stress on certain "distribution feeders." The program will end on May 1, 2002.

ComEd's filing stated that ComEd has identified a number of distribution feeders that

tend to be stressed during peak periods. During such periods, ComEd would consider requesting the customers served by those feeders to reduce their loads. Eventually, rather than seek customer compliance with load reduction requests, ComEd would invest in distribution feeder upgrades. The objective of this program is to determine if those investments can be avoided or delayed by reliance on customer-owned generation.

ComEd's initial statement indicated that only customers owning generators that are capable of providing 200 kW of feeder relief would be eligible for the program. However, on June 12, 2000, ComEd filed a statement with the Commission indicating that it would eliminate that requirement (all other program provisions were unaltered).

As an incentive to participate, customers were offered payments that were based on the amount of investment ComEd would avoid by not upgrading the distribution feeders. Payments were only made for incremental investments in new capacity.

The following conditions applied to the program: Each participating customer must agree to operate its generator (or allow ComEd to start-up the generator, if the generator is controlled by ComEd) upon ComEd's request. Customers will be asked to start-up their generators no more than 15 times each year. The duration of each request will be between two and seven hours, up to a maximum of 75 hours per year. ComEd will provide a one-hour notice for intention to seek start-up of the customer-owned generation. A penalty of 50% of the incentive payment will be assessed in each instance of customer non-compliance with the start-up requests. Back-up generating facilities may be purchased from any supplier, but will be subject to ComEd's system protection requirements.

ComEd stated that it will gather data with respect to the program, and will provide a report to the Commission on the results.

To get the program underway, ComEd first identified the feeder systems that would require upgrade work to serve maximum levels of customer demand. A total of 22 feeders were included in the program. Next, the customers served by those feeders who had the capacity to operate their own generating equipment were identified. There were 94 customers who met this requirement, and others were added later when the 200 kW minimum size requirement was eliminated. ComEd then identified the amount of potential incentive to those customers, based on the costs that could be avoided if the customers installed generating equipment. ComEd made presentations to these customers and to companies involved in the sale of generating equipment.

A total of three customers elected to participate in the program. Two customers installed new generating equipment, and the other customer increased the amount of its existing generating capacity. These three customers were paid approximately \$184,000 in incentive payments for their participation. During 2000, ComEd did not dispatch customer-owned generating equipment as a result of the program.

ComEd identified two primary reasons as the causes for the participation rate in the program. First, it noted, a limited number of customers were potentially eligible for the

program, given the eligibility criteria. Second, ComEd found that the cost of installing or upgrading equipment was often higher than the costs that ComEd would avoid by not performing distribution upgrades.

Table 7: Dispatchable Back-up Generation and Reliability Pricing Experiment

DISPATCHABLE BACK-UP GENERATION AND RELIABILITY PRICING EXPERIMENT (COMED)			
Program Type / Effective Dates	Program Objectives	Eligible Customers / Participation Incentives	Program Results / Expenditures
Pricing program was filed 3/10/2000. Program will end on May 1, 2002.	To determine whether investment in distribution facilities can be avoided or postponed by inducing customers to install back-up generation.	Customers with generators capable of providing of distribution feeder relief were eligible. Customers were paid a lump-sum amount for their investment in increased generator capacity. The payment amount was dependent on ComEd's avoided investment cost.	Three customers elected to participate in the program. ComEd paid a total of \$185,000 in incentive payments to participating customers. ComEd also deferred \$1.8 million in transmission and distribution work for one year as a result of the program.

On May 30, 2000, ComEd filed a statement with the Commission announcing its intention to offer the "Reliability and Restoration Pledge Pricing Experiment for Electric Service." The program began on June 1, 2000, and ended on December 31, 2000. ComEd stated that the program was part of its "Reliability Improvement Plan." Under this program, customers experiencing lengthy or numerous service interruptions could be compensated by ComEd.

ComEd's statement noted that one purpose of the program would be to gather data on the "impact of fixed value performance guarantees on customer satisfaction." The statement cited other experimental purposes related to ComEd's intention to improve the reliability and quality of its electric service.

All ComEd customers were eligible for the program (except for certain unmetered and street and highway lighting customers). A residential customer would receive a \$60 check and non-residential customers would be issued a \$100 billing credit if either of the following circumstances occurred: (i) its service were interrupted for more than eight consecutive hours; or (ii) it experienced three outages, each lasting more than four or more consecutive hours in any sixty-day period. However, certain service interruptions that occurred during and were caused by severe weather, or that were caused by the customer, would not be compensated. Additionally, customers whose service was disconnected for safety or credit reasons were not eligible for compensation. Customers did not need to call ComEd to receive payments. Payments were to be mailed within days after a service interruption occurred that was covered by the program.

ComEd provided inserts in customer bills describing the program. ComEd also provided training to its customer service representatives to enable company representatives to answer

customer questions about the program. ComEd also devised computer programs to identify when customer payments were required.

ComEd made payments totaling \$908,000 to 14,081 customers as a result of service interruptions of the type covered by the program. Payments of \$749,160 were made to residential customers and \$159,500 was paid to non-residential customers. Payments were made to 13,952 customers based on the performance standard that called for payments for service interruptions that lasted more than eight hours. The performance standard that required payments to customers experiencing three outages of four or more continuous hours in a 60-day period resulted in payments to 120 customers.

ComEd also incurred administrative expenses of approximately \$2.4 million during 2000 in connection with this program.

Table 8: Reliability and Restoration Pricing Experiment

RELIABILITY AND RESTORATION PRICING EXPERIMENT (COMED)			
Program Type / Effective Dates	Program Objectives	Eligible Customers / Participation Incentives	Program Results / Expenditures
Pricing program started on June 1, 2001 and ended on December 31, 2001.	To gather data about the effect of service interruption payments on customer satisfaction. Also, to study the use of standards that would not require customers to notify ComEd of service interruptions.	Residential customers received a \$60 payment and non-residential customers received a billing credit of \$100 when service interruption of specified duration occurred.	ComEd made payments of \$908,000 to 14,081 customers as a result of service interruptions. Payments were made to 13,952 customers as compensation for eight hours of continuous service interruptions. ComEd made payments to 120 customers who experienced three lengthy outages in a 60-day period.

In January 1999, the Department of Commerce and Community Affairs (“DCCA”) solicited proposals for energy-related projects. AmerenUE submitted a proposal for the “Pay As You Go Program,” which was accepted by DCCA.

On September 10, 1999, AmerenUE filed a notice with the Commission describing its intention to implement the Pay As You Go Program. This

⁹ While apparently still in effect, the Ameren companies did not use the curtailment programs during 2000 that they operated during 1999. For a description of these programs, see the ICC’s 1999 Report to the General Assembly on Section 16-106 programs (“Illinois Commerce Commission Report to the General Assembly: Experimental Programs Initiated by Electric Utilities Under Section 16-106 of the Electric Service Customer Choice and Rate Relief Law of 1997”).

program is designed to assist low-income customers in achieving a balance between their energy usage and the funds available to pay for that usage. AmerenUE described the experimental program as a billing program.

AmerenUE stated in its notice that low-income customers, after consuming electricity during one month, often struggle to pay their energy bills during the following month. Customers who cannot pay their bills then become subject to late fees, security deposits, and other charges that are not directly related to their electricity consumption. The goal of the Pay As You Go Program is to allow low-income customers the means to pay for their electricity usage as they consume the electricity. This is accomplished by the use of a pre-paid energy card, which is similar to a pre-paid phone card that enables customers to determine the amount of energy that is available for consumption. The use of the Pay As You Go plan will be supplemented by case management from the Urban League of Metropolitan St. Louis, Inc., which will provide home visits, energy assistance support, budgetary education and information about energy conservation methods.

The Urban League selected the one hundred program participants, who must be eligible for the Low-Income Home Energy Assistance Program (“LIHEAP”).

AmerenUE stated that, after the participating customers are identified, AmerenUE will install a home display device in each customer’s residence. The device is capable of showing six pieces of information: (1) the amount of dollars remaining; (2) the cost of energy being used at that moment; (3) the dollar amount of energy used during the 24 hours prior to 12:00 a.m. of the day the display is accessed; (4) the cost of energy used during the past 30 days; (5) the dollar amount of the most recent card entered into the device; and, (6) the cost per kWh of energy purchased. AmerenUE stated that the word “buy” will flash when the device calculates that there is less than four days of usage available.

The pre-paid cards can be purchased at a “pay station” (a machine that is similar to an ATM) located in Fairview Heights, Illinois, that is accessible 24 hours a day. The pay station accepts checks, money orders and cash.

During the period between November 1 and March 31, the pre-paid cards will allow a customer to consume a limited amount of energy that exceeds the amount for which the customer has paid. The card tracks the amount of energy used, and the costs for any energy used will be paid by the customer at the first

transaction after March 31.

AmerenUE stated that several benefits are available for participating customers. Perhaps the primary benefit is that all or part of old debts will be forgiven. Specifically, for each six months that a customer participates in the program, 25% of the customer's past debts will be forgiven. A customer who remains in the program for the program's two-year duration will have 100% of its past debts forgiven by AmerenUE. Through their participation, it is hoped, customers should become more aware of their energy usage and the importance of budgeting for energy consumption, as well as for other expenses.

AmerenUE stated that the program might result in benefits for energy assistance agencies. AmerenUE anticipates that a successful program will free up money for additional clients that otherwise might have been spent on costs that do not provide a direct kWh benefit for customers.

Program participation reached 66 PAYGO installations. However, some participants moved out of the program geographical area, so have dropped over time. Customers who remained with the program have had 25% of their bill arrearages forgiven for each six months that they were enrolled in the program.

The program will terminate in September 2001.

Table 9: Pay As You Go Program

PAY AS YOU GO PROGRAM (AMERENUE)			
Program Type / Effective Dates	Program Objectives	Eligible Customers / Participation Incentives	Program Results / Expenditures
Billing program began September 1999. The program has an expected two-year duration.	To evaluate customers' acceptance of a "pay as you go" payment option. The program will also evaluate the "pay as you go" plan as a customer choice for energy conservation, budgeting, and personal responsibility.	One hundred LIHEAP-eligible customers in the East St. Louis Metro area. Customers receive 25% arrearage reduction for every six months of program participation.	Program began September 1999. Total budgeted expenditures are \$257, 833. A total of 66 customers have participated in the program; participation levels have dropped over time.

On June 8, 2000, Illinois Power Company filed a statement describing its intention to offer a load curtailment program to its commercial and industrial customers. The pricing experiment was initiated in response to heightened awareness about reliability and commodity market pricing during peak pricing periods. In response to the Illinois Attorney General and the Federal Energy Regulatory Commission, the program will emphasize demand side management. The purpose of the program is test the belief that customers would voluntarily curtail their load requirements prior to receiving a directive from Illinois Power to curtail their load.

Customers taking service under interruptible, recallable, curtailable tariffs are not eligible for the program. Illinois Power's firm PPO customers, and delivery services customers taking service from Retail Electric Suppliers are also eligible. Customers must have metering capable of providing interval usage data. The number of customers eligible to receive service would be at the discretion of Illinois Power, and would be based on various technical and economic criteria.

Participating customers would be notified by telephone, fax or e-mail one day prior to a curtailment. Curtailments could also be called with less notice, should conditions arise. Customers will be notified also of the price Illinois Power would pay for the curtailed energy. Customers are not obligated to participate on a given day. There were no minimum load reduction requirements.

Curtailed energy would be calculated as the difference between actual energy consumed during the requested period and the amount of energy participating customers would normally be expected to use during the same period. Customers would be compensated by check soon after each voluntary curtailment.

The program will terminate by December 31, 2004.

No voluntary curtailments were called during 2000.

Table 10: Load Reduction Pricing Experiment

LOAD REDUCTION PRICING EXPERIMENT (ILLINOIS POWER)			
Program Type / Effective Dates	Program Objectives	Eligible Customers / Participation Incentives	Program Results / Expenditures
Pricing program began June 2000. The program is scheduled to terminate by 2005.	To measure non-residential customers' response to voluntarily curtail their load requirements in return for kWh-based payments.	Non-residential customers, with the exception of customers already taking service under existing curtailment programs or taking non-firm PPO service.	No curtailments were called during 2000.

This Report has examined the experimental programs administered by AmerenUE and ComEd, the Illinois electric utilities operating programs during 2000 under Section 16-106 of the Act.

AmerenUE implemented a program to gauge low-income customers' reaction to a new bill payment option (the Pay As You Go Program). This program, which began in 1999, is scheduled to terminate by the end of 2001.

The programs operated by ComEd can be separated into two general categories. One type of program concerns programs targeted at selected customer groups. Several hundred customers have participated in the three programs of this type that ComEd has operated. Like other utilities, ComEd has also operated programs that are designed to enhance the reliability of their electric service. Since each of the programs that are designed for narrowly defined customer groups will expire by the end of 2001, it may be the case that the only experimental programs that ComEd will operate in the future are programs concerned with electric reliability.

Expenditures on ComEd's Section 16-106 programs have been substantial, as its total expenditures during 1997-2000 on these programs now exceed the \$120 million mark. This figure does not take into account the amount of transition charge revenue that ComEd has lost, and will lose in the future, as a result of giving discounts to Section 16-106 program participants who subsequently become delivery services customers. The other utilities that have operated programs have been more modest. For example, AmerenUE's expenditures on its Pay As You Program might not exceed \$250,000.

In the following section, the Commission presents comments about issues related to the programs operated by electric utilities during 2000.

Each of the programs under Section 16-106 has offered rate discounts or other inducements to the customers participating in the program. For most of the larger-scale programs, the discounts have ranged from about 5% to 15%. These discounts likely will not have an impact on the future electric rates by customers not participating in the programs because of the provisions in the Act that allow the Commission, when it sets base electric rates, to exclude the expenditures on experimental programs undertaken pursuant to Section 16-106.¹⁰

The offering of rate discounts or participation incentives gives rise to the question of whether the rate discounts or incentives are commensurate with the expected benefits of the programs; that is, whether the inducements offered to eligible customers are such that the inducements encouraged maximum participation while minimizing costs.

The Commission has no reason to believe that the payments associated with ComEd's primary load curtailment program (the "Load Curtailment Pricing Experiment for Electric Service - Revised"), which were significantly higher than, for example, the rate a customer would pay under one of ComEd's bundled rates, were high in comparison to the expected benefits related to the preservation of system reliability. The benefits of ComEd's program to defer maintenance on certain parts of its transmission and distribution system by encouraging customers to install their own generation seemed to at least match the costs of the program.

It would be difficult to determine any benefits that ComEd has realized as a result of its program to compensate customers for service interruptions, other than perhaps increased customer satisfaction among the customers receiving compensation. The wind and photovoltaic generating experimental program is currently of a very small size, and has had only a negligible effect on system reliability. Since the major purpose of this experiment is to benefit system reliability, the costs spent on this program may not yet be worth the benefits that have been achieved by the program.

While there may be valuable short-term benefits related to reliability through the operation of this program, the primary benefit of the Affinity program concerns information related to retail trade establishments' pattern of electricity use. This information could be useful to alternative suppliers, if the suppliers were able to obtain it.

In its investigation of the Rider CB program, the Commission found that the informational benefits achievable through the program justified the continued existence of the program.¹¹ Since the purpose of the Consolidated Billing Experiment is the same as the purpose of Rider CB, the Commission believes that the relatively small (approximately 5-7.5%) savings achieved by participating customers is probably not excessive relative to the benefits of the program.

The rate discount provided to the hundreds school districts currently participating in the program is about 10%. In return for providing the discount, it appears that the only benefits

¹⁰ See Section 16-111(d) of the Act.

¹¹ Commission Order, Docket 96-0485, p. 34.

that ComEd will receive is information that will be useful to ComEd when the school districts are eligible to purchase power from suppliers other than ComEd. The Commission, therefore, is doubtful that the costs associated with the Student Power 2000 Pricing Experiment are or will be equal to the benefits achievable from the program.

A question that arises when a utility implements an experimental program is whether the programs truly are “experimental,” as that term is used in Section 16-106. Or, put another way, the question is whether the experiments initiated by ComEd and Ameren were the type of programs contemplated by Section 16-106.

ComEd’s load curtailment program does not seem to be the type of program envisioned by Section 16-106. While the program serves a useful and important public purpose, the Commission believes that the program is “experimental” only in the very loose sense of the word. Rather than “experiment,” as one would ordinarily use that term, the program was apparently implemented as a convenient means to help ComEd maintain a reliable amount of electric supply during peak usage periods. There are other means that ComEd could have used to implement this program that do not involve Section 16-106. For example, ComEd could have filed this program for Commission review, which would have also permitted an opportunity for any interested party to comment on the program.

It is difficult to imagine that the General Assembly anticipated that a utility would use Section 16-106, a section of the Law entitled “Billing Programs,” to implement a program which tests the proposition that customers who receive compensation as a result of service outages would have a more favorable opinion of the utility.

On the other hand, ComEd’s use of the Section 16-106 mechanism to implement a renewable energy program seems a proper use of Section 16-106. Even so, there are likely parties who would have appreciated an opportunity to comment on the program before it was filed. ComEd’s use of Section 16-106 to implement its Generation Dispatch program is probably justifiable. Here again, however, had the program been filed for Commission approval, there may have been parties who would have provided useful comments to the Commission about the program.

In its investigation of Rider CB, the Commission found that the Rider CB program would provide useful information, even though the experimental procedure used in the program might not be the procedure typically used in scientific experiments. The Commission has the same conclusion about the successor program to Rider CB, the Consolidated Billing Experiment. It is difficult to discern the objective being tested under the Affinity Group Billing and Student Power 2000 Pricing Experiments.

The Commission believes that AmerenUE’s Pay As You Go Program is the type of experimental program envisioned by Section 16-106. The program is designed to determine whether customers will remain with an experimental program for a sufficient amount of time to enable the customers to erase their past debts with AmerenUE.

In determining whether there may be harmful effects on competition from an experimental program, one should consider the effect of the program on two markets. One market is the

market in which the customers participating in the programs sell products. The second market is the electricity market in which program participants themselves are customers.

There should be negligible, if any, effects on competition from the implementation of the load curtailment program. Had the programs resulted in ongoing rate discounts, there might also be concern about the long-term effects of such discounts on competition, but the programs have only offered short-term rate discounts.

ComEd's program to encourage self-generation might be considered to be positive for electric competition (even though the program is presently of limited scale), since the program encourages participants to move away from ComEd's electric supply service. Likewise, the small-scale wind and photovoltaic program might also be considered to be beneficial to competition, for the same reason. Finally, the Reliability and Restoration Pricing Experiment should have a negligible effect on competition, even though it may result in some customers having a more favorable opinion of ComEd.

The discounts customers have obtained through their participation in the Affinity Group Billing and Consolidated Billing programs will provide an advantage over customers not receiving a discount until the end of 2006, when ComEd will no longer be permitted to assess transition charges to customers who switch to new suppliers.

Virtually all ComEd customers who switch to new suppliers, program participants and non-participants alike, will pay transition charges to ComEd. However, the transition charges assessed to participants of these programs who switch suppliers will be lower than the charges assessed to similar types of customers who are not participating in the experimental program. The amount of the difference between the sets of transition charges will equal the amount of the discount program participants obtained through their participation in the programs. In essence, even though the programs will terminate by the end of 2001, program participants will still receive a discount on their total electric bills until the end of 2006 that likely will not be obtained by non-participants.

It seems unlikely that the advantage has been large enough to significantly disturb the market in which Consolidated Billing or Affinity program customers compete. As noted earlier, the advantage program participants have over non-participants is on the order of 0.5% of operating costs.

The information ComEd continues to learn about the customers participating in the Consolidated Billing Experiment will help it to retain the customers, if it desires to do so, when those customers become eligible to choose new suppliers. This advantage is derived from the knowledge gained from the many contacts with the customers through the program. Such knowledge may be difficult for new suppliers to obtain.

The school districts participating in the Student Power 2000 Power Pricing Experiment do not compete against other school districts. However, the knowledge gained from the program may assist ComEd in retaining the school districts as customers when the school districts are eligible to choose new suppliers. On the other hand, the fact that ComEd has a marketing advantage over other suppliers will be unlikely to discourage suppliers from entering the

Illinois electric market.

The Commission is concerned about the application of the experimental programs to services that contain elements of natural monopoly, such as transmission and distribution services. The General Assembly has made it clear that “delivery services” shall be regulated in a manner similar to traditional regulation. This includes the prohibition on providing those services in an unduly discriminatory manner.

There are sound theoretical reasons why monopoly services, which can only be provided by the incumbent utility, are required by law to remain regulated. For an alternative supplier to provide a final product the supplier (or its customers) will be required to obtain the monopoly transmission and distribution services from the incumbent utility under the utility’s delivery services tariff. An alternative supplier cannot generally duplicate these basic essential services cost-effectively. As a result, an alternative supplier’s customers will be forced to obtain delivery services under regulated prices, terms and conditions.

In contrast, Section 16-106 allows the incumbent electric utilities to provide delivery services to customers taking service under an experimental program at unregulated prices, terms and conditions. An alternative supplier does not have such flexibility. Thus, these programs could be used as a means to compete against alternative suppliers on terms that the incumbent knows a competitor cannot meet.

In light of the potential problem that utilities may discriminate through price and non-price means in the provision of monopoly services, the Commission recommends that the General Assembly consider requiring utilities that offer Section 16-106 programs to customers or customer classes eligible for delivery services, to provide the “delivery services” portion of such programs under the same terms, conditions and rates as the applicable delivery services tariff. There are three underlying reasons for this recommendation. First, this approach would further the cause of promoting competition in the Illinois energy services market which is the stated intention of the Act as indicated in Section 16-101A(d). By eliminating the ability of a utility to act in a potentially anti-competitive manner, the General Assembly can be confident that the flexibility that is provided to the incumbent under Section 16-106 will not impair the burgeoning competitive market.

Second, this solution comports with the General Assembly’s intention that “delivery services shall not be a contract service until such a service is declared competitive.” See 220 ILCS 5/16-102. Last, while the Commission recognizes that a utility could “lock-in” a customer group prior to that group becoming eligible for delivery services, there appears to be some reluctance on the part of customers to join these programs. The Commission is more concerned that these programs could be misused as a last-ditch defensive move on the part of the incumbents rather than a general pricing practice. Thus, it would be appropriate to apply this recommendation to Section 16-106 programs that extend beyond the date at which a customer becomes eligible for delivery services.

The Commission specifically notes that this recommendation applies solely to programs under Section 16-106 as currently understood by the Commission and must not be interpreted to reflect any determination by the Commission about its authority to require a utility to provide

bundled energy services to its own customers using the applicable delivery services tariffs.

